Susan -

Waste and Hazardous Materials Division (WHMD) staff has conducted a preliminary review of the Scopes of Work (SOWs) for Midland Area Soils and the Tittabawassee River Sediments/ Flood Plain submitted by Dow on August 11. The purpose of this note is to convey the results of that review to Dow and the Community Advisory Panel (CAP) and to identify the next steps in the SOW review and approval process. By copy of this note to Cheryl Howe, I am asking that she forward this note to CAP members for their information.

The preliminary review identified a number of key issues that must be resolved prior to approval of the SOWs. Many of these issues were discussed by WHMD and Remediation and Redevelopment Division staff at our August 5 meeting with Dow and in the follow-up e-mail on August 7. Our preliminary review included a side-by-side review of the SOWs in comparison to Condition XI.B. of the operating license. This review indicates that Dow did not adequately address all of the applicable elements that are required by the license to be included in the SOWs.

Specifically, Condition XI.B.3.(a) of the license requires the SOWs to identify and propose the implementation of specific interim response activities (IRAs) for the protection of public health for the areas identified in Condition XI.B.2. of the license that are known through prior environmental sampling to be impacted by releases from the facility. An IRAis a short term action that is taken to control ongoing risks while site characterization is underway or before a final remedy is selected. The path set forth in the license for IRAs does not include or reference the step of submitting an IRA work plan for approval under Condition XI.G. of the license. (It is also noted that, unlike Condition XI.G., Condition XI.B. is not subject to the dispute resolution provisions of Condition XI.E. of the license). Issuance of the license was the written notification by the Chief of the WHMD that IRAs are necessary. The specific IRAs were to be identified and proposed in the SOWs for direct implementation upon approval of the SOWs. The SOWs should divide IRAs into two categories: those that will reduce exposure and can be implemented immediately in areas of known contamination and those which require further investigation.

Of particular concern is that IRAs proposed in the Tittabawassee River Area SOW do not include any direct exposure mitigation for the Riverside Blvd. residential area. Your proposal to conduct sampling and an exposure evaluation without controlling potential ongoing exposures is not acceptable as an IRA. As noted in the August 7 e-mail to you on this issue, consideration should be given to offering the residents in this area a range of alternatives to begin reducing the potential for exposure immediately – before the results of an exposure study are

available. Sampling and exposure investigation can and should be a part of the IRA for this area, but direct mitigation is also required.

In addition, the Tittabawassee River Area SOW should propose to identify any other residential properties in the Tittabawassee River area of concern that are or could be contaminated so that immediate IRAs (sampling and exposure controls) may be implemented, if necessary.

The SOWs do not appropriately prioritize work in a schedule based on consideration of potential risks to human health and the environment in accordance with Condition XI.B.3.(b) of the license. As an example, without even considering the time necessary for regulatory review and approval, under the proposed schedule Dow would not be proceeding with the identification of property that is frequently flooded (and therefore probably contaminated) until almost a year after the SOW is approved. The same concern applies to the identification and characterization of the areas of highest contamination in Midland.

It is also not clear why a six-month period is necessary to prepare a current conditions report or why approval of that report is necessary to begin the development of a Remedial Investigation work plan. The current conditions report can be submitted as a component of the work plan to accelerate the review and approval process. The proposed schedule should be modified to provide for the commencement of the remedial investigation during the 2004 field season. Data collection necessary for the evaluation and implementation of IRAs should be initiated yet this year.

Condition XI.B.3.(b)(i) of the license requires Dow to identify in the SOWs additional potential exposure pathways that do not have Part 201 of Act 451 generic criteria (e.g., food chain exposures, house dust, etc.). Currently the SOWs state that additional exposure pathways will be identified and evaluated and, therefore, do not address this requirement.

Condition XI.B.3.(b)(ii) of the license requires the SOWs to identify the specific areas proposed for investigation and the process proposed for selecting those areas. Other than the four areas proposed in the Tittabawassee SOW for IRAs, specific areas for investigation are not identified in the SOWs. For example, as discussed on August 5, the areas of Midland where the highest levels of surficial soil contamination is presumed to be present are not specifically identified for immediate investigation. This would seem to be a reasonable and necessary IRA. Also as discussed on August 5, specific areas of investigation should include the Shiawassee Wildlife Refuge and the Greenpoint Nature Center.

The SOWs appear to only address dioxins and furans as the "contaminants of concern." As discussed on August 5, Dow is required to conduct a remedial

investigation that includes characterization of all contaminants that may have been released beyond the facility boundary. It is not appropriate to narrow the SOWs to dioxins and furans at this point.

As we have discussed, Dow may begin to implement interim measures to begin reducing exposure immediately, without waiting for MDEQ approval.

As for next steps the WHMD has options under Condition XI.B.4., which include either modifying and approving the SOWs, or providing a detailed Notice of Deficiency on the SOWs. We would like to discuss with Dow the substantive changes necessary to develop SOWs that may be quickly approved by the WHMD. Timely resolution of these issues is necessary and prudent for the protection of public health and the environment. Meeting prior to the September 3 CAP meeting will afford Dow the opportunity to address the preliminary concerns and provide a meaningful basis for discussion at the September 3 meeting and subsequent public meetings as to how you intend to address concerns already identified.

As mentioned previously, we will be meeting with the CAP on September 3 and will be hosting two public meetings later in September to solicit public comment on the SOWs. We have requested Dow participation in these meetings to present your SOWs. To date, we have not received confirmation that Dow intends to present the SOWs. Please let us know so that we can coordinate these efforts.

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